



OIPE

RAW SEQUENCE LISTING

DATE: 05/21/2002

PATENT APPLICATION: US/10/046,801

TIME: 15:18:40

Input Set : N:\Crf3\RULE60\10046801.RAW.txt Output Set: N:\CRF3\05212002\J046801.raw

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1 <110> APPLICANT: Unger, Evan C.
      2 <120> TITLE OF INVENTION: Charged Lipids and Uses For The Same
      3 <130> FILE REFERENCE: UNGR1592
      4 <140> CURRENT APPLICATION NUMBER: 10/046,801
      5 <141> CURRENT FILING DATE: 2002-05-13
      8 <150> PRIOR APPLICATION NUMBER: US/09/540,448
     9 <151> PRIOR FILING DATE: 2000-03-31
                                                                 ENTERED
     11 <150> PRIOR APPLICATION NUMBER: 08/925,353
     12 <151> PRIOR FILING DATE: 1997-09-08
     13 <160> NUMBER OF SEQ ID NOS: 37
     14 <170> SOFTWARE: PatentIn Ver. 2.1
     16 <210> SEQ ID NO: 1
     17 <211> LENGTH: 5
     18 <212> TYPE: PRT
     19 <213> ORGANISM: Artificial Sequence
     20 <220> FEATURE:
     21 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
W--> 22 <221> NAME/KEY: UNSURE
     23 <222> LOCATION: (4)
     24 <223> OTHER INFORMATION: X is azetidine
W--> 25 < 400 > 1
W--> 26
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     27
     29 <210> SEQ ID NO: 2
     30 <211> LENGTH: 12
     31 <212> TYPE: PRT
     32 <213> ORGANISM: Artificial Sequence
     33 <220> FEATURE:
     34 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
W--> 35 <221> NAME/KEY: UNSURE
     36 <222> LOCATION: (7)
     37 <223> OTHER INFORMATION: X is azetidine
W--> 38 < 400 > 2
W--> 39
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    43 <211> LENGTH: 14
    44 <212> TYPE: PRT
    45 <213> ORGANISM: Artificial Sequence
    46 <220> FEATURE:
    47 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
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W--> 48 <221> NAME/KEY: UNSURE 49 <222> LOCATION: (9)

DATE: 05/21/2002

PATENT APPLICATION: US/10/046,801 TIME: 15:18:40 Input Set : N:\Crf3\RULE60\10046801.RAW.txt Output Set: N:\CRF3\05212002\J046801.raw 50 <223> OTHER INFORMATION: X is azetidine W--> 51 <400> 3 W--> 52 Phe Glu Trp Pro Gly Trp Tyr Gln Xaa Tyr Ala Leu Pro Leu 53 55 <210> SEQ ID NO: 4 56 <211> LENGTH: 4 57 <212> TYPE: PRT 58 <213> ORGANISM: Artificial Sequence 59 <220> FEATURE: 60 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence 61 <400> SEQUENCE: 4 62 Arg Gly Asp Ser 63 1 65 <210> SEQ ID NO: 5 66 <211> LENGTH: 6 67 <212> TYPE: PRT 68 <213> ORGANISM: Artificial Sequence 69 <220> FEATURE: 70 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence 71 <400> SEQUENCE: 5 Gly Arg Gly Asp Ser Pro 73 1 75 <210> SEQ ID NO: 6 76 <211> LENGTH: 4 77 <212> TYPE: PRT 78 <213> ORGANISM: Artificial Sequence 79 <220> FEATURE: 80 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence 81 <400> SEQUENCE: 6 82 Gly Pro Arg Pro 83 85 <210> SEQ ID NO: 7 86 <211> LENGTH: 159 87 <212> TYPE: PRT 88 <213> ORGANISM: Artificial Sequence 89 <220> FEATURE: 90 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence 91 <400> SEQUENCE: 7 92 Asn Lys Leu Ile Val Arg Arg Gly Gln Ser Phe Tyr Val Gln Ile Asp 93 1 10 94 Phe Ser Arg Pro Tyr Asp Pro Arg Asp Leu Phe Arg Val Glu Tyr 95 Val Ile Gly Arg Tyr Pro Gln Glu Asn Lys Gly Thr Tyr Ile Pro Val 96 97 40 Pro Ile Val Ser Glu Leu Gln Ser Gly Lys Trp Gly Ala Lys Ile Val 98 99 100 Met Arg Glu Asp Arg Ser Val Arg Leu Ser Ile Gln Ser Ser Pro Lys

70

Cys Ile Val Gly Lys Phe Arg Met Tyr Val Ala Val Trp Thr Pro Tyr

75

RAW SEQUENCE LISTING

101

102

RAW SEQUENCE LISTING DATE: 05/21/2002 PATENT APPLICATION: US/10/046,801 TIME: 15:18:40

```
103
     104
               Gly Val Leu Arg Thr Ser Arg Asn Pro Glu Thr Asp Thr Tyr Ile Leu
     105
                                                105
                                                                     110
     106
               Phe Asn Pro Trp Cys Glu Asp Asp Ala Val Tyr Leu Asp Asn Glu Lys
     107
                       115
                                            120
                                                                125
     108
               Glu Arg Glu Glu Tyr Val Leu Asn Asp Ile Gly Val Ile Phe Tyr Gly
     109
                                        135
                                                            140
     110
               Glu Val Asn Asp Ile Lys Thr Arg Ser Trp Ser Tyr Gly Gln Phe
     111
               145
                                    150
     113 <210> SEQ ID NO: 8
     114 <211> LENGTH: 26
     115 <212> TYPE: PRT
     116 <213> ORGANISM: Artificial Sequence
     117 <220> FEATURE:
     118 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
W--> 119 <221> NAME/KEY: UNSURE
     120 <222> LOCATION: (9)
     121 <223> OTHER INFORMATION: X is unknown
W--> 122 <400> 8
W--> 123
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     124
                                                     10
     125
               Phe Ser Arg Pro Tyr Asp Pro Arg Arg Asp
     126
     128 <210> SEQ ID NO: 9
     129 <211> LENGTH: 41
     130 <212> TYPE: PRT
     131 <213> ORGANISM: Artificial Sequence
     132 <220> FEATURE:
     133 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     134 <400> SEQUENCE: 9
               Asp Asp Ala Val Tyr Leu Asp Asn Glu Lys Glu Arg Glu Glu Tyr Val
     135
     136
               Leu Asn Asp Ile Gly Val Ile Phe Tyr Gly Glu Val Asn Asp Ile Lys
     137
     138
                            20
     139
               Thr Arg Ser Trp Ser Tyr Gly Gln Phe
     142 <210> SEQ ID NO: 10
     143 <211> LENGTH: 9
     144 <212> TYPE: PRT
     145 <213> ORGANISM: Artificial Sequence
     146 <220> FEATURE:
     147 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     148 <400> SEQUENCE: 10
     149
               Ala Arg Arg Ser Ser Pro Ser Tyr Tyr
     150
     152 <210> SEQ ID NO: 11
     153 <211> LENGTH: 10
     154 <212> TYPE: PRT
     155 <213> ORGANISM: Artificial Sequence
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RAW SEQUENCE LISTING DATE: 05/21/2002 PATENT APPLICATION: US/10/046,801 TIME: 15:18:40

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156 <220> FEATURE:
     157 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     158 <400> SEQUENCE: 11
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     160
                                  5
     162 <210> SEQ ID NO: 12
     163 <211> LENGTH: 19
     164 <212> TYPE: PRT
     165 <213> ORGANISM: Artificial Sequence
     166 <220> FEATURE:
     167 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     168 <400> SEQUENCE: 12
     169
               Arg Ser Pro Ser Tyr Tyr Arg Tyr Asp Gly Ala Gly Pro Tyr Tyr Ala
     170
     171
               Met Asp Tyr
     173 <210> SEQ ID NO: 13
     174 <211> LENGTH: 21
     175 <212> TYPE: PRT
     176 <213> ORGANISM: Artificial Sequence
     177 <220> FEATURE:
     178 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     179 <400> SEQUENCE: 13
               Ala Arg Arg Ser Pro Ser Tyr Tyr Arg Tyr Asp Gly Ala Gly Pro Tyr
     180
     181
                 1
                                  5
                                                     10
     182
               Tyr Ala Met Asp Tyr
     183
                             20
     185 <210> SEQ ID NO: 14
     186 <211> LENGTH: 69
     187 <212> TYPE: PRT
     188 <213> ORGANISM: Artificial Sequence
     189 <220> FEATURE:
     190 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
W--> 191 <221> NAME/KEY: UNSURE
     192 <222> LOCATION: (40)..(41)
     193 <223> OTHER INFORMATION: X is any amino acid
W--> 194 < 400 > 14
     195
               Gly Glu Glu Cys Asp Cys Gly Ser Pro Glu Asn Pro Cys Cys Asp Ala
     196
                                                     10
     197
               Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Asp Gly Leu Cys
     198
                                                 25
W--> 199
               Cys Ala Gly Cys Arg Phe Lys Xaa Xaa Arg Thr Ile Cys Arg Arg Ala
     200
                                             40
     201
               Arg Gly Asp Asn Pro Asp Asp Arg Cys Thr Gly Gln Ser Ala Asp Cys
     202
                                         55
     203
               Pro Arg Asn Gly Tyr
     204
                65
     206 <210> SEQ ID NO: 15
     207 <211> LENGTH: 73
     208 <212> TYPE: PRT
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RAW SEQUENCE LISTING DATE: 05/21/2002 PATENT APPLICATION: US/10/046,801 TIME: 15:18:40

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209 <213> ORGANISM: Artificial Sequence
     210 <220> FEATURE:
     211 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     212 <400> SEQUENCE: 15
     213
               Glu Ala Gly Glu Asp Cys Asp Cys Gly Ser Pro Ala Asn Pro Cys Cys
     214
                                                     10
     215
               Asp Ala Ala Thr Cys Lys Leu Leu Pro Gly Ala Gln Cys Gly Glu Gly
     216
     217
               Leu Cys Cys Asp Gln Cys Ser Phe Met Lys Lys Gly Thr Ile Cys Arg
     218
               Arg Ala Arg Gly Asp Asp Leu Asp Asp Tyr Cys Asp Gly Ile Ser Ala
     219
     220
                                         55
     221
               Gly Cys Pro Arg Asn Pro Leu His Ala
     222
                65
                                     70
     224 <210> SEQ ID NO: 16
     225 <211> LENGTH: 68
     226 <212> TYPE: PRT
     227 <213> ORGANISM: Artificial Sequence
     228 <220> FEATURE:
     229 <223> OTHER INFORMATION: Description of Artificial Sequence: Novel Sequence
     230 <400> SEQUENCE: 16
               Glu Ala Gly Glu Glu Cys Asp Cys Gly Thr Pro Glu Asn Pro Cys Cys
     231
     232
     233
               Asp Ala Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Glu Gly
     234
     235
               Leu Cys Cys Asp Gln Cys Arg Phe Lys Gly Ala Gly Lys Ile Cys Arg
     236
                                             40
               Arg Ala Arg Gly Asp Asn Pro Asp Asp Cys Thr Gly Gln Ser Ala Asp
     237
     238
     239
               Cys Pro Arg Phe
     240
                65
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     243 <211> LENGTH: 70
     244 <212> TYPE: PRT
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     246 <220> FEATURE:
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W--> 248 <221> NAME/KEY: UNSURE
     249 <222> LOCATION: (40)..(41)
     250 <223> OTHER INFORMATION: X is any amino acid
W--> 251 <221> UNSURE
     252 <222> LOCATION: (67)
     253 <223> OTHER INFORMATION: X is any amino acid
W--> 254 <400> 17
     255
               Gly Glu Cys Asp Cys Gly Ser Pro Glu Asn Pro Cys Cys Asp Ala
     256
     257
               Ala Thr Cys Lys Leu Arg Pro Gly Ala Gln Cys Ala Asp Gly Leu Cys
     258
                             20
                                                 25
 --> 259
               Cys Asp Gln Cys Arg Phe Lys Xaa Xaa Arg Thr Ile Cys Arg Ile Ala
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RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/046,801

DATE: 05/21/2002 TIME: 15:18:41

Input Set : N:\Crf3\RULE60\10046801.RAW.txt
Output Set: N:\CRF3\05212002\J046801.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the $\langle 220 \rangle$ to $\langle 223 \rangle$ fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 4
Seq#:2; Xaa Pos. 7
Seq#:3; Xaa Pos. 9
Seq#:8; Xaa Pos. 9
Seq#:14; Xaa Pos. 40,41
Seq#:17; Xaa Pos. 40,41,67
Seq#:24; Xaa Pos. 5

VERIFICATION SUMMARY DATE: 05/21/2002 PATENT APPLICATION: US/10/046,801 TIME: 15:18:41

```
L:22 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:25 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
L:26 \ M:341 \ W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:35 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:38 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2
L:39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:48 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:51 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3
L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:119 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:122 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:8
L:123 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:191 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:194 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:14
L:199 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:32
L:248 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:251 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17
L:254 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:17
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:32
L:263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:64
L:332 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:335 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24
L:336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
```